

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-92 (Cancelled)

93 (Currently amended). An isolated monoclonal antibody which recognizes IGIF or IL-18 that ~~mainly shows a single protein band with has~~ an activity of inducing interferon- γ production at a position corresponding to 19,000 \pm 5,000 daltons when electrophoresed in a sodium dodecylsulfate (SDS) polyacrylamide gel free of reducing agent, and the following physiochemical properties of (1) to (4):

(1) Molecular weight

19,000 \pm 5,000 daltons on gel filtration and sodium dodecylsulfate polyacrylamide gel electrophoresis (SDS-PAGE);

(2) Isoelectric point (pI)

4.8 \pm 1.0 on chromatofocusing;

(3) Biological activity

Inducing the interferon- γ production by immunocompetent cells; and

(4) Amino acid sequence

Comprising the amino acid sequence of SEQ ID NO:2, wherein Xaa is Met or Thr.

Claim 94 (Cancelled).

95 (Previously presented) . An isolated monoclonal antibody according to claim 93, wherein said IGIF or IL-18 is obtainable from a mammal.

Claims 96 and 97 (Cancelled).

98 (Previously presented) . An isolated monoclonal antibody according to claim 93 or 95 which is an IgG or IgM class antibody.

99 (Previously presented) . An isolated antibody according to claim 93 or 95 which is labeled with a radiolabel, an enzyme, or a fluorophore.

100 (Previously presented) . An isolated antibody according to claim 93 or 95 which is capable of inhibiting the biological activity of IGIF or IL-18.

101 (Previously presented) . A hybridoma which produces a monoclonal antibody according to claim 93 or 95.

102 (Previously presented) . A method for producing a monoclonal antibody which comprises culturing a hybridoma according to claim 101 *in vitro* or *in vivo* under conditions suitable to promote production of the antibody and recovering the antibody so produced.

103 (Previously presented) . A method according to claim 102, further comprising the step of subjecting the antibody to one or more processes selected from the group consisting of salting out, dialysis, filtration, concentration, centrifugation, separatory sedimentation,

gel filtration chromatography, ion- exchange chromatography, HPLC, affinity chromatography, gel electrophoresis, and isoelectric focusing.

104(Previously presented). A method for determining the presence of IGIF or IL-18 in a sample, comprising the steps of:

contacting a sample suspected to contain IGIF or IL-18 with an antibody according to claim 93 or 95 under conditions suitable to promote the specific binding of the antibody to IGIF or IL-18 to form an immune complex; and

detecting any such immune complex which is so formed.

105(Previously presented). A method according to claim 104, wherein the antibody is immobilized on an insoluble matrix or substrate.

106(Previously presented). A method according to claim 104, wherein the antibody is labeled with a radiolabel, an enzyme, or a fluorophore.

107(Previously presented). A method according to claim 104, further comprising the step of quantifying the amount of IGIF or IL-18 present in the sample.

108(Previously presented). A method according to claim 104, wherein the IGIF or IL-18 has the amino acid sequence shown in SEQ ID NO:2, wherein Xaa is Met or Thr.

109(Previously presented). A method for purifying IGIF or IL-18 from a sample containing other components, comprising the steps of:

contacting the sample with a monoclonal antibody according to claim 93 or 95 under conditions suitable to promote the specific binding of the antibody to IGIF or IL-18 to form an immune complex; and
separating the immune complex from at least one of the other components in the sample.

110(Previously presented). A method according to claim 109, further comprising the step of recovering the IGIF or IL-18 from the immune complex.

111(Previously presented). A method according to claim 109, wherein the antibody is immobilized on an insoluble matrix.

112(Previously presented). A method according to claim 109, wherein the contacting step is effected by applying the sample to a chromatography column comprising an insoluble matrix.

113(Previously presented). A method according to claim 112, further comprising the step of recovering the IGIF or IL-18 from the chromatography column.

114(Previously presented). A method according to claim 113, wherein the IGIF or IL-18 is recovered in nearly quantitative yield and with a purity of at least 95%.

115(Previously presented). A method according to claim 109, wherein the IGIF or IL-18 has the amino acid sequence shown in SEQ ID NO:2, wherein Xaa is Met or Thr.

116(Previously presented). A method of inhibiting the biological activity of IGIF or IL-18, comprising the step of contacting an antibody according to claim 100, with the IGIF or IL-18.

117(Previously presented). A method according to claim 116, wherein the IGIF or IL-18 has the amino acid sequence shown in SEQ ID NO:2, wherein Xaa is Met or Thr.

118(Currently amended). An isolated monoclonal antibody, which recognizes interferon-gamma (IFN- γ) inducing protein, also known as IGIF and IL-18, having the amino acid sequence shown in SEQ ID NO:2, wherein Xaa is Met or Thr, and ~~mainly showing a single protein band with having an activity of~~ inducing interferon- γ production at a position corresponding to 19,000 \pm 5,000 daltons when electrophoresed in a sodium dodecylsulfate (SDS) polyacrylamide gel free of reducing agent.

119(Previously presented). An isolated monoclonal antibody according to claim 95, wherein said mammal is mouse.

120(Previously presented). An isolated antibody obtainable by using, as an antigen, IGIF or IL-18, which has been extracted and collected from the liver of a mouse previously challenged with

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Corynebacterium parvum having the following physiochemical properties of (1) to (4):

(1) Molecular weight

19,000±5,000 daltons on gel filtration and sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE);

(2) Isoelectric point (pI)

4.8±1.0 on chromatofocusing;

(3) Biological activity

Inducing interferon- γ production by immunocompetent cells; and

(4) Amino acid sequence

Comprising the amino acid sequence of SEQ ID NO:2, wherein Xaa is Met or Thr.